

## **Section 11 Asset Class – Signs:**

The Signs asset class includes:

- ✓ Sign Assemblies

All of the assets within the Signs asset class are maintained by Traffic Maintenance crews at the direction of the Traffic Operations group in the Traffic Management Division.

### **Sign Assemblies:**



A sign assembly is a static message board that conveys essential information to road users, pedestrians and bicyclists about how to negotiate city streets and trails. A sign assembly includes the sign face or blade and the mount.

In the 2007 Status and condition Report SDOT organized the sign inventory into four (4) major categories of signs that are located on sign assemblies:

- ✓ Regulatory
- ✓ Warning
- ✓ Directional/Guide
- ✓ Temporary

Since 2007, SDOT has revised its sign categories to align with the Manual on Uniform Traffic control Devices (MUTCD) and currently organizes signs into these ten categories:

- ✓ Regulatory
- ✓ Warning
- ✓ Guide signs, conventional
- ✓ Guide signs, freeways
- ✓ Specific service signs (logo)
- ✓ Tourist direction
- ✓ Recreational and cultural interest
- ✓ Emergency management
- ✓ Non-mutcd traffic signs
- ✓ School signs

### **Current Inventory and Anticipated Annual Growth:**

An inventory of signs has been maintained since the 1920s when it was recorded in card files. From 1979-1981, this inventory was transcribed into electronic format in the Data General system which was later imported into the Hansen system in 2000 where it is currently maintained. This inventory of signs counted the signs rather than the sign assemblies. Multiple signs may exist on any sign assembly. SDOT's current inventory of signs follows:

Category of Signs	Number of Signs
Regulatory	104220
Warning	17766
Guide Signs Conventional	2431
Guide Signs, Freeways	411
Specific Service (Logo)	0
Tourist Direction Signs	1312
Recreational and Cultural Interest	0
Emergency Management	
Non-MUTCD Signs	1530
School signs	4162

The count of signs/sign assemblies has not been verified by a physical inventory.



**Sign Assembly**

The electronic inventory does not have a full count of street name signs (estimated at 57,600 sign blades) or bike trail signs, most of which are informational (Conventional guide signs). Since 2007 BTG funding has been provided to replace many of the signs/sign assemblies on major corridors. Similarly, street name signs have been placed along major corridors at a rate of about 1700 intersections per year since 2007. Both of these efforts have resulted in updated sign/sign assembly records. These additions to the sign/sign assembly inventory were analyzed and prepared for implementation in the electronic inventory late in 2009, prior to the preparation of this update, and these numbers are not yet available.

The anticipated growth in sign assemblies overall has not been determined.

The estimated replacement value for sign assemblies is in excess of \$52 million.

***Condition Ratings, Useful Life and Life Cycle Costs, and Maintenance Approach:***

Sign assemblies are not regularly inspected and are maintained on a customer request basis. Age is often used as a surrogate for the condition of a sign assembly. When newly installed, the expected useful life of a sign assembly is twelve (12) years. It degrades to fair condition in ten (10) years, and, at the end of its useful life, it is considered in poor condition and is eligible for replacement.

In 2010, a newly installed sign assembly costs \$100 - \$1,000 to acquire and install. In twelve (12) years at the end of its useful life, this cost is expected to increase to \$245 - \$2450 (2007 inflated dollars).

***Current Performance Measures:***

BTG funding has established the following performance measures for sign assemblies:

Performance Measure	2009 Actual	2010 Goal
Regulatory signs replaced	8133	6500
Street Name signs replaced (by intersection)	1716 intersections	1700 intersections
All signs replaced within a corridor	1 corridors	1 corridors

Performance Measure	2009 Actual	2010Goal
Signage of school zones improved	52 schools	10 schools
Bike route signs installed	19 miles of bike routes	30 miles of bike routes

The TSP has established an additional performance measure for sign assemblies:

- ✓ Achieve 100% industry standard condition for all signs (time period not specified).

The signage improvements accomplished through BTG funding include bringing signs up to industry standard and will also satisfy the TSP objective.

***Funding Requirements and Unmet Funding Needs:***

The 2010 Traffic Operations budget has base funding of approximately \$1.1million to repair and replace sign assemblies.

A sizable component of the sign assembly replacement budget is for emergency repair/replacement of sign assemblies that are damaged. These emergency replacement costs average \$440,000 per year.

Replacement of regulatory signs is performed at a rate of 6.6% per year. If all regulatory signs are to be on a twelve year cycle 9% should be replaced each year. To do so will require an additional annual amount in excess of \$200,000

Limited analytical information is available that would enable a precise determination of funding requirements for replacement of the other categories of signs.



**Street Name Sign**